

**COMMITTEE ON GOVERNMENT REFORM  
SUBCOMMITTEE ON ENERGY AND RESOURCES**



***OPENING STATEMENT  
CHAIRMAN DARRELL ISSA  
APRIL 28, 2005***

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Our nation's electricity demand continues to grow as the population increases, the economy expands, and elements of our daily life become increasingly electrified. Official forecasts call for electricity use to increase 50 percent by 2025. The Department of Energy estimates that this growth in demand, coupled with the retirement of older plants, means that the nation will need 281 gigawatts of new electrical generation capacity—enough electricity to power another state the size of California. To satisfy the nation's growing appetite for electricity, the nation will need hundreds of new power plants of all types in the coming decades.

Nuclear power plants currently generate 20% of the nation's electricity. Projected growth in electricity demand, volatile fossil fuel prices, and environmental concerns have revitalized interest in nuclear generation in the U.S. and elsewhere in the world. Nuclear power is a proven, emission-free source of electricity that can contribute to the security of energy supplies and the stability of prices.

Today's operating nuclear power plants are workhorses in the U.S. electricity generation system, accounting for 20 percent of the nation's electricity, second only to coal. 103 reactors operating

at 65 sites in 31 states produced more electricity in 2004 than the nation's entire electrical output in the early 1960s, when the first large-scale commercial reactors were ordered.

Nuclear power plants have a proven record of producing reliable, safe, and clean power. The nuclear industry in the U.S. can also point to decades of safe operation. Significant security upgrades introduced at all nuclear plants in the period following September 11 have gone a long way toward ensuring that nuclear power plants are among the most secure pieces of the country's civilian infrastructure. Moreover, nuclear plants operate with reliable operating costs that are relatively insulated from price fluctuations. Unlike fossil fuels, the availability and cost of uranium are stable and not likely to fall prey to cartels, embargoes, or price volatility. Perhaps most importantly, nuclear generation has also contributed considerable air quality benefits to the nation. Unlike electricity generated from coal and natural gas, nuclear energy does not result in any emissions of conventional air pollutants, such as nitrogen oxide and sulfur dioxide, nor of carbon dioxide.

Despite these projected demand increases and dramatic performance improvements, the nuclear power industry is expected to see its contribution in the nation's electricity portfolio diminish. 41 new 1,000 megawatt nuclear power plants are needed by 2025 just to maintain nuclear power's 20 percent share of the nation's electricity generation, yet the most recent new plant to come on-line did so in 1996, and no nuclear power plants have been ordered in the U.S. since 1978. Building the first new nuclear power plant in the U.S. in decades is regarded as a high-risk investment by both the nuclear power industry and the financial community, largely based on past experience.

Instead, fossil fuel-fired power plants account for almost 70 percent of the nation's electricity needs and, given current policies, are projected to continue to provide the lion's share in coming decades as additional natural gas plants are built.

Elsewhere in the world, however, nuclear power is moving ahead. Countries that once rejected nuclear power—such as Germany and Italy—are beginning to revise their policies. Moreover, as China and India develop, their electricity demand is projected to skyrocket and nuclear will play a large part in meeting that demand. China plans to commission 21 new plants between now and 2020, increasing the number of reactors in operation from 9 to 30. Furthermore, India's national energy policy calls for increasing the country's 2.5 gigawatt nuclear generating capacity one hundred-fold by 2050.

In the absence of an aggressive effort to expand the role of nuclear power, forecasts call for a rapid development of natural gas generating capacity which will require a dramatic increase in importation of natural gas from overseas sources—a market that seems likely to resemble that for petroleum in the immediate future, with prices being set in a tight world market and supplies being widely transported around the globe.

It is now clearer than ever that we must adopt a comprehensive national energy policy and establish a long-term strategy to ensure the stability of our economy and of our national interests. At the minimum, such a policy must expand domestic opportunities for production of traditional and non-traditional sources of energy while expanding conservation and efficiency efforts.

Considering whether and how to maintain or expand nuclear power's share of U.S. electricity generation in the coming decades, rather than allowing its share to shrink, is an essential

component of crafting a comprehensive national energy policy. Accordingly, this hearing will attempt to identify the role of nuclear power in meeting America's electricity demand in the 21st century, the extent of the challenges faced by nuclear power generators, and determine how these issues may be addressed by a comprehensive energy policy.

We look forward to hearing testimony from our distinguished panel. We are pleased to have:

- **Dr. Donald Jones**, Vice President and Senior Economist at RCF Economic and Financial Consulting in Chicago. In 2003 and 2004, he co-directed, with George Tolley of the University of Chicago's Economics Department, the Chicago study of the future of nuclear power in the United States. Prior to joining RCF, he was a research staff member at Oak Ridge National Laboratory and served on faculty at the University of Chicago, the University of Colorado, and the University of Tennessee.
- **Mr. Marvin Fertel**, Senior Vice President for Business Operations and Chief Nuclear Officer at the Nuclear Energy Institute (NEI). Mr. Fertel is responsible for leading NEI's programs directed at increasing the value of existing nuclear energy industry assets and for developing policy initiative and industry programmatic activities that support the development of new commercial nuclear projects. Mr. Fertel has over 30 years of experience consulting to electric utilities on issues related to designing, siting, licensing and managing both fossil fuel and nuclear plants.
- **Dr. Patrick Moore** has been a leader in the international environmental field for over 30 years. He is a founding member of Greenpeace and served seven years as Director of Greenpeace International. As the leader of many campaigns Dr. Moore was a driving

force shaping policy and direction while Greenpeace became the world's largest environmental activist organization. In recent years, Dr. Moore has been focused on the promotion of sustainability and consensus building among competing concerns. In 1991 Dr. Moore founded Greenspirit Strategies, a consultancy focusing on environmental policy and communications regarding natural resources, biodiversity, energy and climate change.